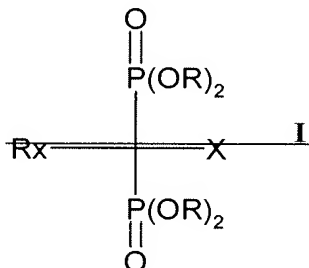


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A pharmaceutical preparation which comprises 2-(imidazol-1-yl)-1-hydroxyethane-1,1-diphosphonic acid or a pharmacologically acceptable salt thereof in combination with N-[2-cyano-4-(2,2-dimethyl-propylamino)-pyrimidin-5-ylmethyl]-4-(4-methyl-piperazin-1-yl)-benzamide or a pharmacologically acceptable salt thereof for simultaneous, sequential or separate use, a bisphosphonate of formula I, or a physiologically acceptable and cleavable ester or a salt thereof



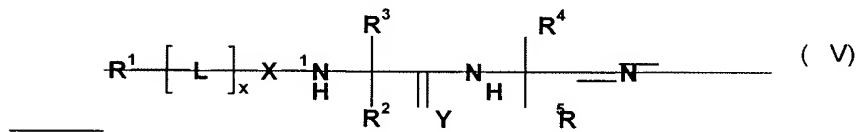
wherein

X is hydrogen, hydroxyl, amino, alkanoyl, or an amino group substituted by C₁-C₄ alkyl, or alkanoyl;

R is hydrogen or C₁-C₄ alkyl and

Rx is a side chain which contains an optionally substituted amino group, or a nitrogen containing heterocycle (including aromatic nitrogen containing heterocycles), or a pharmaceutically acceptable salt thereof or any hydrate thereof and

a) a cat K inhibitor of formula V, or a physiologically acceptable and cleavable ester or a salt thereof



wherein R¹ is optionally substituted (aryl, aryl lower alkyl, lower alkenyl, lower alkynyl, heterocyclyl or heterocyclyl lower alkyl);

R² and R³ together represent lower alkylene optionally interrupted by O, S or NR⁶ so as to form a ring with the carbon atom to which they are attached and R⁶ is hydrogen, lower alkyl or aryl lower alkyl;

R⁴ and R⁵ are independently H, or optionally substituted (lower alkyl or aryl lower alkyl), C(O)OR⁷, or C(O)NR⁷R⁸, wherein R⁷ is optionally substituted (lower alkyl, aryl, aryl lower

alkyl, cycloalkyl, bicycloalkyl, bicycloalkyl or heterocyclyl), and R^8 is H, or optionally substituted (lower alkyl, aryl, aryl lower alkyl, cycloalkyl, bicycloalkyl, bicycloalkyl or heterocyclyl); or

R^4 and R^6 together represent lower alkylene, optionally interrupted by O, S or NR^6 , so as to form a ring with the carbon atom to which they are attached, and R^6 is hydrogen, lower alkyl or aryl lower alkyl; or

R^4 is H or optionally substituted lower alkyl and R^5 is a substituent of formula $-X^2-(Y^1)_n-$ (Ar)_p-Q-Z wherein

Y^1 is O, S, SO , SO_2 , $N(R^6)SO_2$, $N(R^6)$, SO_2NR^6 , $CONR^6$ or NR^6CO ;

N is zero or one;

P is zero or one;

X^2 is lower alkylene; or when n is zero, X^2 is also C_2-C_7 alkylene interrupted by O, S, SO , SO_2 , NR^6 , SO_2NR^6 , $CONR^6$ or NR^6CO , and R^6 is hydrogen, lower alkyl or aryl lower alkyl; Ar is arylene;

Z is hydroxyl, acyloxy, carboxyl, esterified carboxyl, amidated carboxyl, aminosulfonyl, (lower alkyl or aryl lower alkyl)aminosulfonyl, or (lower alkyl or aryl lower alkyl)sulfonylaminocarbonyl; or Z is tetrazolyl, triazolyl or imidazolyl;

Q is a direct bond, lower alkylene, Y^1 lower alkylene or C_2-C_7 alkylene interrupted by Y^1 ;

X^1 is $C(O)$, $C(S)$, $S(O)$, $S(O)_2$, or $P(O)(OR^6)$, and R^6 is as defined above;

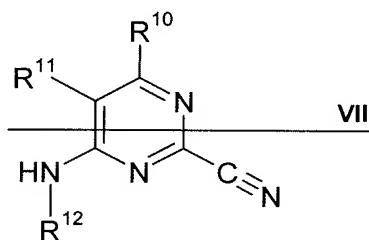
Y is oxygen or sulphur;

L is optionally substituted $-Het-$, $-Het-CH_2-$ or $-CH_2-Het-$, and Het is a hetero atom selected from O, N or S; and

X is zero or one; and

aryl in the above definitions represents carbocyclic or heterocyclic aryl; or alternatively

b) another class of cat K inhibitors of formula VII, or a physiologically acceptable and cleavable ester or a salt thereof



wherein

R^{10} is H, R^{14} , OR^{14} or $NR^{13}R^{14}$;

wherein R^{13} is H, lower alkyl or C_3 to C_{10} cycloalkyl, and

R^{14} is lower alkyl or C_3 to C_{10} cycloalkyl, and

wherein R^{13} and R^{14} are independently, optionally substituted by halo, hydroxy, lower alkoxy, CN, NO_2 , or optionally mono- or di-lower alkyl substituted amino;
 R^{11} is $CO-NR^{15}-R^{16}$, $NH-CO-R^{15}$, $CH_2-NH-C(O)-R^{15}$, $CO-R^{15}$, $S(O)-R^{15}$, $S(O)_2-R^{15}$, CH_2-CO-R^{15} or $CH_2-NR^{15}-R^{16}$;

wherein

R^{15} is aryl, aryl-lower alkyl, C_3-C_{10} cycloalkyl, C_3-C_{10} cycloalkyl-lower alkyl, heterocyclyl or heterocyclyl-lower alkyl,

R^{16} is H, aryl, aryl-lower alkyl, aryl-lower alkenyl, C_3-C_{10} cycloalkyl, C_3-C_{10} cycloalkyl-lower alkyl, heterocyclyl or heterocyclyl-lower alkyl, or

wherein R^{15} and R^{16} together with the nitrogen atom to which they attached are joined to form an N-heterocyclyl group,

wherein N-heterocyclyl denotes a saturated, partially unsaturated or aromatic nitrogen containing heterocyclic moiety attached via a nitrogen atom thereof having from 3 to 8 ring atoms optionally containing a further 1, 2 or 3 heteroatoms selected from N, NR^{17} , O, S, $S(O)$ or $S(O)_2$ wherein R^{17} is H or optionally substituted (lower alkyl, carboxy, acyl (including both lower alkyl acyl, e.g. formyl, acetyl or propionyl, or aryl acyl, e.g. benzoyl), amide, aryl, $S(O)$ or $S(O)_2$), and wherein the N-heterocyclyl is optionally fused in a bicyclic structure, e.g. with a benzene or pyridine ring, and wherein the N-heterocyclyl is optionally linked in a spiro structure with a 3 to 8 membered cycloalkyl or heterocyclic ring wherein the heterocyclic ring has from 3 to 10 ring members and contains from 1 to 3 heteroatoms selected from N, NR^{16} , O, S, $S(O)$ or $S(O)_2$ wherein R^{16} is as defined above), and wherein heterocyclyl denotes a ring having from 3 to 10 ring members and containing from 1 to 3 heteroatoms selected from N, NR^{17} , O, S, $S(O)$ or $S(O)_2$ wherein R^{17} is as defined above), and

wherein R^{15} and R^{16} are independently, optionally substituted by one or more groups e.g. 1-3 groups, selected from halo, hydroxy, oxo, lower alkoxy, CN or NO_2 or optionally substituted (optionally mono- or di-lower alkyl substituted amino, lower alkoxy, aryl, aryl-lower alkyl, N-heterocyclyl or N-heterocyclyl-lower alkyl (wherein the optional substitution comprises from 1 to 3 substituents selected from halo, hydroxy, lower alkoxy, lower alkoxy-lower alkyl, lower alkoxy-carbonyl, CN, NO_2 , N-heterocyclyl or N-heterocyclyl-lower alkyl, or optionally mono- or di-lower alkyl substituted amino);

R^{12} is independently H, or optionally substituted (lower alkyl, aryl, aryl-lower alkyl, C_3-C_{10} cycloalkyl, C_3-C_{10} cycloalkyl-lower alkyl, heterocyclyl or heterocyclyl-lower alkyl) and

wherein R^2 is optionally substituted by halo, hydroxy, oxo, lower alkoxy, CN, NO_2 or optionally mono- or di-lower alkyl substituted amino.

for simultaneous, sequential or separate use.

Claim 2 (previously presented): The pharmaceutical preparation according to claim 1; wherein its use is for the treatment of malignant diseases, bone metastasis, cancer cell growth, or/and cancer therapy-induced bone loss.

Claim 3 (previously presented): A method of treating a patient suffering from a malignant disease, bone metastasis, cancer cell growth, or/and cancer-therapy-induced bone loss comprising administering to the patient an effective amount of the pharmaceutical preparation according to claim 1.

Claim 4 (previously presented): A method of treating a patient suffering from a benign disease, bone loss disease, osteoporosis, osteoarthritis comprising administering to the patient an effective amount of the pharmaceutical preparation according to claim 1.

Claim 5 (previously presented): A pharmaceutical composition comprising zoledronic acid and a cathepsin K inhibitor for the inhibition of bone metastasis, cancer cell growth or/and inhibition of cancer-therapy-induced bone loss.

Claims 6-7 (canceled)